Canadian Community Health Survey

Cycle 1.1 Report 2

Physical Activity in Nova Scotia

May 2003

The Canadian Community Health Survey (CCHS) is a new series of health surveys being conducted by Statistics Canada. Its purpose is to provide regular and timely cross-sectional estimates of health determinants, health status, and health system utilization for 136 health regions across the country. This survey adds to Canada's capacity for in-depth analysis of health-related issues in this country. Data from the first installment of the CCHS, Cycle 1.1, was collected between May and December 2001, and released in May 2002.

CCHS Cycle 1.1 provided a great deal of information valuable to decision and policy-makers. A general overview of Cycle 1.1 data was released by the Performance Measurement and Health Informatics Section (PMHI) of the Nova Scotia Department of Health in October 2002 and is available at <http://www.gov.ns.ca/heal/downloads/cchs_dha.pdf>.

"Physical Activity in Nova Scotia" is the second in a series of reports providing an in-depth look at thematic CCHS data.

Report Highlights

- less than half (45 per cent) of Nova Scotians aged 12 and over report being moderately physically active
- people become less physically active as they age
- 93 per cent of physically active people report being in good health
- physically active people are less likely to suffer from chronic conditions such as diabetes, high blood pressure, and heart conditions
- smokers are less likely to report being physically active

NOVA SCOTIA
Department of Health

106-05408/

Physical Activity and the CCHS

Being **physically active** is defined in the CCHS[1] as having an average daily energy expenditure of 3.0+ kilocalories per kilogram of bodyweight (KKD). Health Canada reports that this is the level of exercise required for cardiovascular health benefit. Someone who weighs 200 pounds would require about 30 minutes of brisk walking a day to maintain this level of energy expenditure. **Moderate physical activity** is defined as expending an average of between 1.5 and 2.9 kilocalories per kilogram of weight per day. People who report activity levels leading to an average daily energy expenditure of less than 1.5 KKD (a level of activity too low to offer substantial health benefits) are considered to be **physically inactive**.

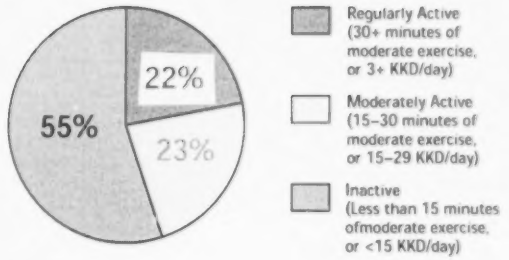
Energy expenditure in the CCHS is estimated from the responses given to a series of questions pertaining to the types of activities respondents participate in, as well as the lengths of time they spend engaged in these activities. The Physical Activity Index (PAI) separates ranges of energy expenditure into the aforementioned categories: active, moderately active, and inactive.

In this report, the term "physically active" refers to levels of energy expenditure, indicated by the PAI as either active, or moderately active. To avoid confusing the broad grouping "physically active," and the sub-category "active," we will refer to the sub-category "active," as "regularly active."

It is important to note that the amount of activity required to be considered physically active is a **minimum** level for some cardiovascular health benefits. Health Canada's guidelines for maintaining a healthy lifestyle, as well as WHO's international guidelines for optimal growth and development, recommend four times this level of activity (between 6 and 8 KKD per kg). This suggests that the activity levels reported from CCHS data overstate the number of people who are active at the level required for substantial health benefits.

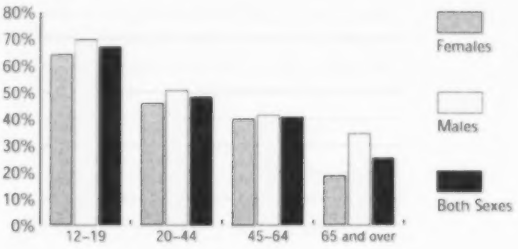
Twenty-two per cent of Nova Scotians aged 12 and over are regularly active. Another 23 per cent are moderately active. Over one half (55 per cent) of the residents of this province are physically inactive. These rates are similar for both rural and urban areas of the province.

Physical Activity Levels in Nova Scotia


22%
55%
23%
Regularly Active (30+ minutes of moderate exercise, or 3+ KKD/day)
Moderately Active (15–30 minutes of moderate exercise, or 15–29 KKD/day)
Inactive (Less than 15 minutes ofmoderate exercise, or <15 KKD/day)

People become less active as they age. Sixty-seven per cent of people aged 12 to 19 are physically active; among people aged 20 to 44, 48 per cent are physically active. Activity levels decline to 41 per cent for people aged 45 to 64 and, again, to 25 per cent for those aged 65 and over. This trend is similar for both men and women.

Per cent Physically Active by Age and Sex



The Nova Scotia Sport and Recreation Commission formed an interdepartmental committee, Physically Active Children and Youth (PACY), to address children's inactivity in the province. Their study showed that the activity level among youth varies drastically between age groups. While 90 per cent of grade 3 males and 92.3 per cent of grade 3 females accumulated 60 minutes or more of physical activity on 5 or more days of the week, only 12.6 per cent and 6.9 per cent of grade 11 males and females, respectively, accumulated this amount of physical activity. Among grade 7 students, they found that 62 per cent of males, and 44 per cent of females accumulated 60 minutes or more of physical

activity on 5 or more days of the week. These findings also show the discrepancy between results obtained from measured physical activity data and those obtained from self-reported physical activity data.[2]

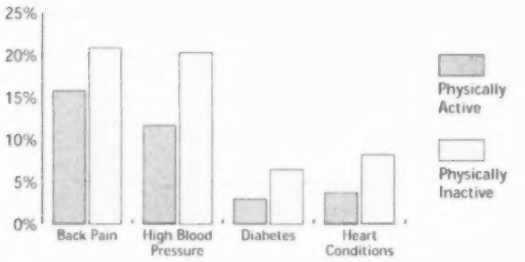
The prevalence of physical activity among adults increases with education level. Among those with less than a secondary education, only 28 per cent are physically active. This rate increases to 41 per cent among those who have completed a secondary education and increases further to 48 per cent for those who have completed a post secondary education. A similar trend appears across income groups: people with higher incomes tend to be more active than those in lower groups.

Why be Physically Active?

Daily physical activity is important to one's health. Ninety-three per cent of physically active Nova Scotians report being in good health, compared with only 81 per cent of physically inactive Nova Scotians. It is important to note that these figures reflect respondents' perceptions of their own health, and not their actual health status. It should also be noted that the difference in self-perceived health between the two groups cannot be attributed solely to differences in physical activity levels, due to the known correlation between poor health behaviours: people who are physically inactive are more likely to smoke and to drink heavily.

By comparing the incidence of chronic conditions among those who are physically active and those who are not, we can get a better idea of the relationship between physical activity and our health. The most common chronic conditions are more prevalent among physically inactive Nova Scotians. Some specific conditions that are more prevalent among people who are physically inactive are back pain, high blood pressure, diabetes, and heart conditions. It is likely that there exists a two-way relationship between chronic conditions and physical activity. While increased activity may reduce the chance of developing a chronic condition, having a chronic condition may decrease the ability to be physically active. Both of these factors are likely to play a role in the trends observed here.

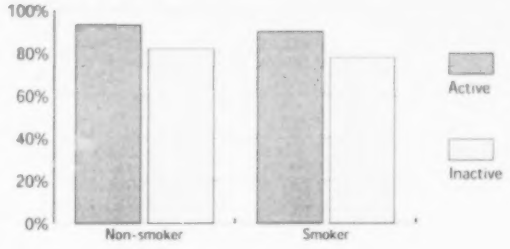
Incidence of Selected Chronic Conditions by Activity Level



Physical Activity and Smoking

Forty-eight per cent of non-smokers are physically active as opposed to 36 per cent of smokers. This illustrates the correlation between poor health behaviours discussed in the previous section of this report. Health Canada warns that physical inactivity is as detrimental to one's health as is smoking.

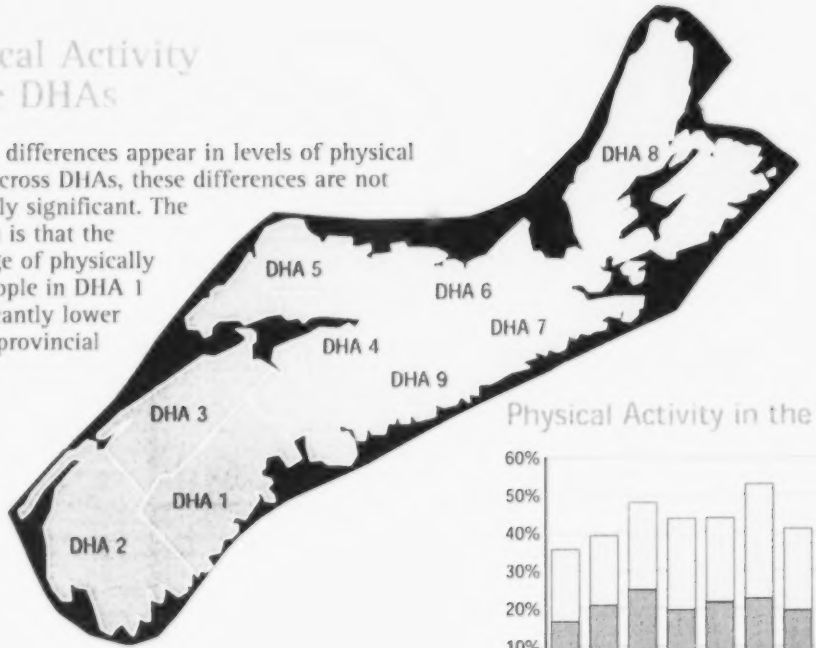
Per cent Self-Perceived Good Health by Activity Level and Smoker Status



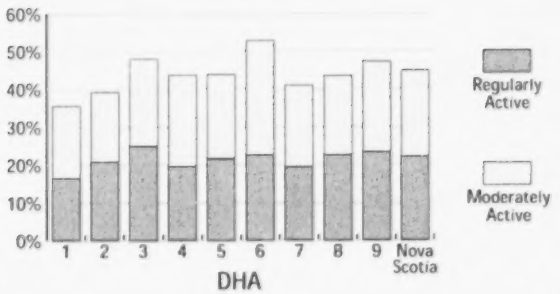
Physically active smokers report being in better health than inactive non-smokers. Ninety per cent of physically active smokers report being in good health as opposed to 82 per cent of inactive non-smokers. Not surprisingly, those most frequently reporting being in good health were active non-smokers (93 per cent of active non-smokers reported being in good health). Only 78 per cent of inactive non-smokers reported being in good health.

Physical Activity in the DHAs

Although differences appear in levels of physical activity across DHAs, these differences are not statistically significant. The exception is that the percentage of physically active people in DHA 1 is significantly lower than the provincial average.



Physical Activity in the DHAs



Additional Resources

"Physical Activity Levels in Children and Youth in the Province of Nova Scotia," a study conducted by Campagna, Ness, Rasmussen, Porter, and Rehman, and submitted to the Sport and Recreation Commission, Government of Nova Scotia (December 2002) is available at <http://www.gov.ns.ca/src/publications/NS_PA_Report_revised.pdf>.

Health Canada's guidelines for enjoying a physically active lifestyle are available at <http://www.hc-sc.gc.ca/hppb/paguide>.

This document was prepared by the Performance Measurement and Health Informatics Section, Information Management Branch, of the Nova Scotia Department of Health. For additional information on the data included in this report, please contact us at (902) 424-8291.

We would like to thank the Nova Scotia Sport and Recreation Commission for their assistance in preparing this report.

Copies of this report are available on line at <http://www.gov.ns.ca/health/downloads/cchs_physical_activity_2003.pdf>.

Copies of the first report in this series, "Smoking in Nova Scotia," are available on line at <http://www.gov.ns.ca/health/downloads/cchs_smoking_2003.pdf>.

The next report in this series, "Health Services Utilization in Nova Scotia," is to be released in July 2003.

1 Definitions of physical activity used in the CCHS are consistent with those used in the National Population Health Survey (NPHS), also conducted by Statistics Canada.

2 For information on how physical activity was measured for the PACY report, please refer to Campagna, Ness, Rasmussen, Porter, and Rehman, 2000.